

Claims

1. Nucleic acid molecule, selected from the group consisting of
 - 5 a) nucleic acid molecules encoding the polypeptide disclosed by SEQ ID NO: 2;
 - b) nucleic acid molecules containing the sequence depicted by SEQ ID NO: 1;
 - 10 c) nucleic acid molecules whose complementary strand hybridizes under stringent conditions with a nucleic acid molecule of a) or b) and which have the biological function of a fluorescent protein;
 - 15 d) nucleic acid molecules which differ from those mentioned under c) due to the degeneracy of the genetic code;
 - e) nucleic acid molecules whose sequences are at least 95% homologous to SEQ ID NO: 1 and which have the biological function of a
20 fluorescent protein; and
 - f) nucleic acid molecules whose sequences are at least 65% homologous to SEQ ID NO: 1 and which have the biological function of a
25 fluorescent protein.
2. Molecules according to Claim 1, whose sequence contains a functional promoter 5' of the sequence.
3. Molecules according to Claim 2, which are a part of recombinant DNA or of
30 RNA vectors.

4. Organisms, which contain a vector described according to Claim 3.
5. Oligonucleotides, having more than 10 contiguous nucleotides which are identical or complementary to DNA or RNA sequences according to Claim 1.
6. Peptides, which are encoded by the nucleotide sequence according to Claim 1.
7. Method of expressing the CGFP polypeptide according to Claim 6 in bacteria, eukaryotic cells or in *in vitro* expression systems.
8. Method of purifying/isolating a CGFP polypeptide according to Claim 6.
9. Peptides, having more than 5 contiguous amino acids which are recognized immunologically by antibodies to the fluorescent protein CGFP.
10. Use of the fluorescent protein CGFP according to Claims 1 to 7 as a marker gene and reporter gene.